

REMARKS

Claims 61-64, 70, 72-74, 76-97, 103, 105-107 and 109-120 are pending in this application, with claims 61, 93 and 94 being written in independent form. By this Amendment, claims 61, 62, 72, 74, 76, 77, 94, 95, 97, 105, 107, 109, 110 and 113 are amended. Claims 71, 75, 104 and 108 are cancelled without prejudice or disclaimer. No new matter is added.

I. Claim Objections:

Claims 64 and 97 are objected to due to informalities. Specifically, it is alleged that the recitation of a “light transmissive member” should be rewritten as “light transmissive element.”

Claim 64 depends from claim 63 which recites a light transmissive member as part of the light transmissive element. Thus, revising claim 64 is unnecessary.

Similarly, claim 97 depends from claim 96 which also recites the light transmissive member being a component of the light transmissive element. However, to provide some clarification, claim 97 is revised. Accordingly, withdrawal of the objections is respectfully requested.

II. Claim Rejections – 35 U.S.C. §112:

Claim 85 is rejected under 35 U.S.C. §112, first paragraph, second paragraph. The rejection is respectfully traversed.

Claim 85 depends on claim 83 which is dependent upon claim 82. Claim 82 recites a means for transporting the light and, therefore, there is antecedent basis for the recitation of the “transporting means” recited in claim 85. Therefore, withdrawal of the rejection is respectfully requested.

III. Claim Rejections – 35 U.S.C §103:

Claims 61-64, 70-97 and 103-120 are rejected under 35 U.S.C. § 103(a) as being obvious over US 5,502,568 to Ogawa et al. (Ogawa) in view of US 2001/0005004 to Shiratsuki et al. (Shiratsuki). As claims 71, 75, 104 and 108 are cancelled, the rejection of those claims is moot. The rejection of the remaining rejected claims is respectfully traversed.

Neither Ogawa nor Shiratsuki, whether considered alone or in combination, disclose or suggest each and every feature recited in the rejected claims. For example, the combination of

references fails to disclose or suggest a touch pad, comprising ... first and second means adapted to receive light received by the surface, transmitted along the first surface by the light transmissive element, and for outputting corresponding signals, the first and second receiving means comprising two detectors for detecting light received at at least two different areas or points ... wherein the detectors are adapted to determine an angle of incidence of detected light at each area or point, each detector being an at least one-dimensional detector having a number of detecting points or areas and being positioned so that light from two different points on the first surface are detected at different points/areas of at least one the detectors, as recited in independent claim 61.

Moreover, the combination of references fails to disclose or suggest the stylus or pen recited in independent claim 93, or the method of operating a touch pad comprising ... providing a first means and a second means comprising at least two detectors, each detector being an at least one-dimensional detector having a number of detecting points or areas ... transmitting the received light inside the light transmissive element along the first surface, detecting the transmitted light by the first means and second means ... the detecting step comprising detecting light received at at least two different areas or points, the determining step comprising determining an angle of incidence of detected light at each area or point, and detecting light emitted from two different points on the first surface at different points/areas of at least one of the detectors, as recited in independent claim 94.

Ogawa relates to an optical position detecting unit that includes an optical position pointer 2 and a single photodetector 4. The optical position detecting unit detects the coordinates of a position pointed by the optical position pointer 2 on the basis of the distance to a light emitting portion and direction of incidence of light, both of which are detected by the single photodetector 4 (column 6, lines 13-25). Light is transmitted over a display surface of the image pickup unit and a distance to the pointer 2 is calculated by making use of a pattern image of a pattern plate 21 projected onto a linear image sensor 23 (column 8, lines 59-62; Fig. 1, Fig. 3). An angle to the pointer 2 is determined by using a pattern of suitable and known characteristics on the pattern plate 21 (column 9, lines 35-40, column 13, lines 23-26).

It is alleged in the Office Action that the pattern plate 21 corresponds to the claimed light transmissive element but it is admitted that the pattern plate 21 is not adapted to transmit received light inside of the light transmissive element along the first surface.

In an attempt to overcome the admitted deficiency of Ogawa, Shiratsuki is combined with Ogawa and it is alleged that the combination of references renders the rejected claims obvious. Shiratsuki relates to an irregular pattern detector which captures, as images, irregular patterns such as fingerprints (paragraph [0002]). Shiratsuki addresses problems in fingerprint ID apparatuses caused by deformation of a detected image (paragraphs [0004]-[0009]). As shown in Fig. 5 of Shiratsuki, a finger F is placed on a light guide body 2 and a light from a light source 1 is transmitted through the light guide body to the finger F. A spherical mirror 2C is used to reflect detected light to an imaging lens 4 that is then detected by a camera 3.

It is alleged in the Office Action that Shiratsuki discloses a transmissive means adapted to transmit received light inside of the light transmissive element along the surface. Specifically, it is alleged that the light guide body 2 is a wave guide, the imaging lens 4 is a CCD and the incident light L1 radiated from the light source 1 is a light pen. Thus, it is alleged that when Shiratsuki is so interpreted and combined with Ogawa, that the resulting combination renders the rejected claims obvious. Accordingly, it appears that the Examiner believes that one of ordinary skill in the art would modify Ogawa so that light is transmitted inside of the pattern plate 21 along the surface of the pattern plate 21 to a CCD detector. However, such a modification of Ogawa would render Ogawa's photodetector 4 inoperable. The photodetector 4 of Ogawa relies on a pattern being projected on the plate 21 onto a CCD linear image sensor 23. By modifying Ogawa as suggested in the Office Action, the projected pattern could no longer be projected onto the CCD thereby rendering Ogawa inoperable.

Moreover, there is no motivation or suggestion to one of ordinary skill in the art to make the combination as proposed in the Office Action. As discussed above, Ogawa discloses a digitizer having a single image pickup unit for determining the coordinates of a light pen by transmitting light over a display surface to an image pickup unit. In contrast, Shiratsuki relates to capturing images of an object, such as a finger, on the surface and does not relate to obtaining a position of the object on the surface. Rather, Shiratsuki seeks to accurately reproduce the detected image thereby eliminating deformations in the fingerprint. Moreover, it is alleged in the Office Action that it would have been obvious for one of skill in the art to make the proposed combination to "more precisely detect the light pens position." However, rather than enabling a more precise detection in the position of a light pen, combining the references would result in an inoperable device.

Finally, even were the references combined as proposed in the Office Action, the combination of references would still not disclose or suggest the additional features recited in the amended claims. Accordingly, withdrawal of the rejection is respectfully requested.

CONCLUSION

In view of the above, Applicant earnestly solicits reconsideration and allowance of all of the pending claims.

Pursuant to 37 C.F.R. §1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120.00 extension fee herewith.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
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